



DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width:100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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**\*109385\***

November-21-13 2:14:23 PM

**\*N900040100\***

Setup Start \*NS1\*

Stop \*NS2\*

**Start Date:** 11/21/13      **Start Qty:** 34.00

**\*34\***

**Cust Item ID:**

**Required Date:** 11/21/13      **Req'd Qty:** 34.00

**\*34\***

**Customer:**

**Reference:**

Run Start \*NR1\*

**Approvals:** \_\_\_\_\_ **Process Plan:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Tooling:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Stop \*NR2\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

**Insp.  
Stamp**

B.A 13/12/05

**\*120\***

QC

## Memo

0.00

## Quality Control

0.00

\*130\*

QC

## Memo

0.00

## Quality Control

DAS  
40  
9-89

13/12/66

0.00

**\*140\***

Outsource4

## Memo

0.00

Outsource process - Anodize

Issue P/O to ATG : 22353

1- Black Anodize as per Dwg 646.3100

2- PRIME AS PER DWG, SEE NOTE #2

Certification of Conformity is required

C2 13/12/11 (37)

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



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Doc/Data									
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Handling/Pre									
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Operator									
Offset/Setup									
Process									
Supplier									
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Work Order ID 109385

\*109385\*

Page 3

November-21-13 2:14:23 PM

Item ID: 649.5013

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Deflector

Start Date: 11/21/13 Start Qty: 34.00

\*34\*

Cust Item ID:

Required Date: 11/21/13 Req'd Qty: 34.00

\*34\*

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start \*NR1\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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150 Receive &amp; Inspect for Damage &amp; Mat'l Certs 0.00

\*150\*

Packaging

Memo

0.00

Packaging

155 QC5- Inspect part completeness to step on W/O 0.00

\*155\*

QC

Memo

0.00

Quality Control

180 Identify as per dwg & Stock Location: ST4/8 0.00

\*180\*

Packaging

Memo

0.00

Packaging

\*\*\*IDENTIFY AS PER APICAL MPP-I20 BY STAMPING P# AND REV\*\*\*

34X SPB14-1-9

34 nhl 14-01-13

34X DAS 28 9-89 14-01-14

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



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### FAULT CATEGORY

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Work Order ID 109385

\*109385\*

Page 4

November-21-13 2:14:23 PM

Item ID: 649.5013 Accept \*N900040100\* Setup Start \*NS1\*  
 Revision ID: Stop \*NS2\*  
 Item Name: Deflector  
 Start Date: 11/21/13 Start Qty: 34.00 \*34\* Cust Item ID:  
 Required Date: 11/21/13 Req'd Qty: 34.00 \*34\* Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start \*NR1\*  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	QC21- Final Inspection - Work Order Release	0.00							
*190*									
QC	Memo	0.00							
Quality Control									

PL 14-01-15  
 14-01-15

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



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Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
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### FAULT CATEGORY

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# Picklist Print

November-21-13 2:14:22 PM

Page 1

Work Order ID: 109385

Parent Item: 649.5013

Parent Item Name: Deflector

Start Date: 11/21/13

Required Date: 11/21/13

Start Qty: 34.00

Required Qty: 34.00

Comments: IPP REV:A NEW ISSUE 13-09-24 RQ VERIFIED BY:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
649.5013E Deflector		Manufactured	No				f	132.0000		23			

Location

Loc Qty

Loc Code

MAT035

132

92313

132

22.3

MH 12/12/03

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



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APICAL INDUSTRIES, INC.	ENGINEERING CHANGE NOTICE NO. 03693				SHEET 1 OF 1	
	DWG NO. 6495000		REV. C	PREPARED BY B. PETERS	DATE: 11/14/12	EFFECT-ON-DWG <input type="checkbox"/> INC. <input checked="" type="checkbox"/> UNINC.
	DWG TITLE: DEFLECTOR					
APPROVED BY: ENGR <i>[Signature]</i>		MFG <i>[Signature]</i>	QC <i>[Signature]</i>		EFF: NEXT ORDER	
TRANSACTION CODES (TC): A-ADD C-CREATE R-REVISE D-DELETE		REASON: ADDED ALTERNATE MATERIAL.				ECR: D-12-001

IS

⚠ PRIMARY MATERIAL: 7075-T651 ALUMINUM PER AMS-QQ-A-250/12.  
ALTERNATE MATERIAL: 7075-T6511 ALUMINUM PER AMS-QQ-A-200/11.

SHEET 1, ZONE A2 IS:

F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL	SPECIFICATION
DOCUMENTS EFFECTED:				<input type="checkbox"/> RFMS <input type="checkbox"/> MDL <input type="checkbox"/> INSTALL INSTRUC <input type="checkbox"/> ICA <input type="checkbox"/> BOM		CHANGE CATEGORY <input type="checkbox"/> MAJOR <input checked="" type="checkbox"/> MINOR
				DER REVIEW REQUIRED		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

109385 MVS  
13-11-25

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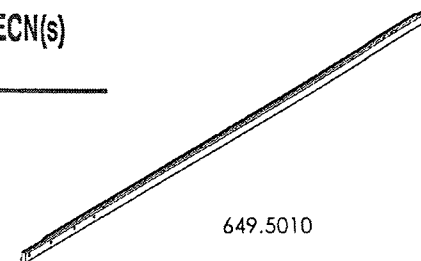
NOTES: UNLESS OTHERWISE SPECIFIED

- 1 MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12.
- 2 FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2, COLOR BLACK:  
PRETREAT PRC-DESOTO PR-148 ADHESION PROMOTER:  
PRIME IAW MIL-P-23377J TYPE I CLASS N; 1-2 MIL MAX.
3. DE BURR AND BREAK ALL SHARP EDGES.
4. IDENTIFY IAW MPP-120. LASER ETCH P/N AND REVISION, 12 PT. CENTURY GOTHIC.
5. ALL DIMENSIONS SHOWN PRIOR TO FINISH.
- 6 PART DIMENSIONS CONTROLLED BY CAD MODEL FILE: 649.5010 DEFLECTOR.SLDPRT, LAST MODIFIED 04-16-12.
- 7 PART DIMENSIONS CONTROLLED BY CAD MODEL FILE: 649.5012 DEFLECTOR.SLDPRT, LAST MODIFIED 11-03-11.
- 8 PART DIMENSIONS CONTROLLED BY CAD MODEL FILE: 649.5013 DEFLECTOR.SLDPRT, LAST MODIFIED 04-16-12.

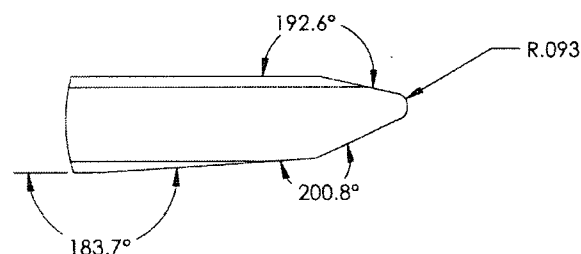
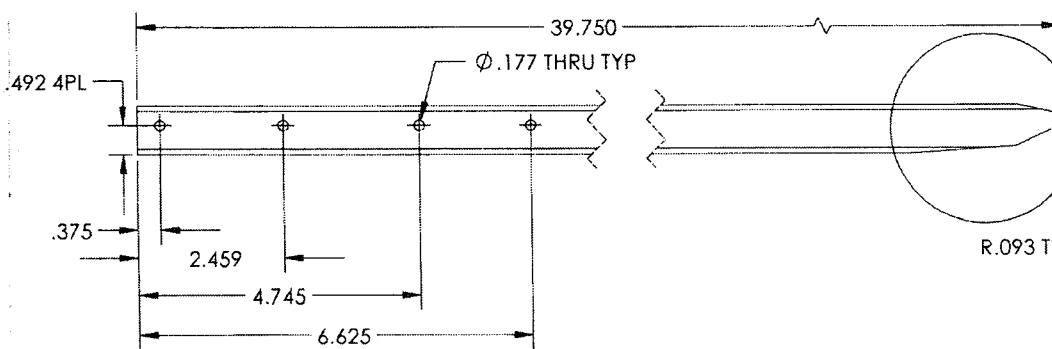
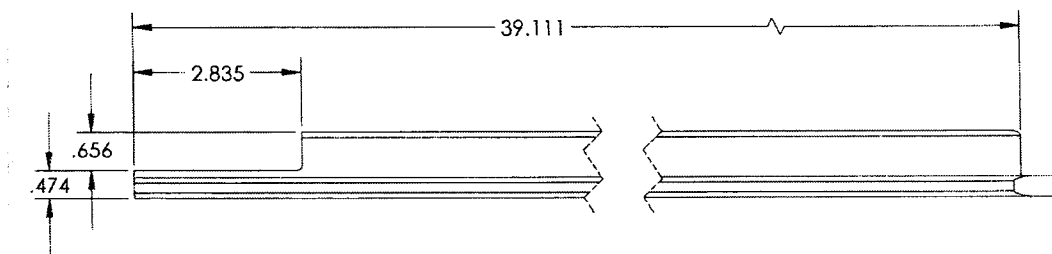
UNINCORPORATED ECN(s)

03693

REV	DESCRIPTION	DATE	APPROVED
	LAST PROTOTYPE REVISION #2		JLA
1	INITIAL RELEASE	11-03-11	P. BRAVO
2	INCORPORATED LEAD IN AND DATE	04-16-12	P. BRAVO
3	INCORPORATED REVISION	05-02-12	P. BRAVO
4	INCORPORATED ECN 03693	05-02-12	P. BRAVO



649.5010



DETAIL A  
SCALE 1:1

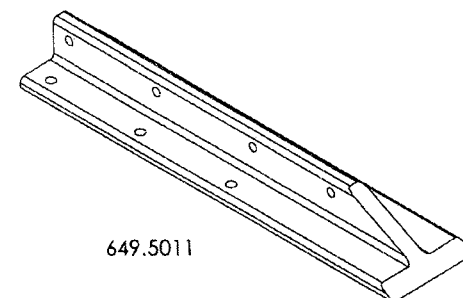
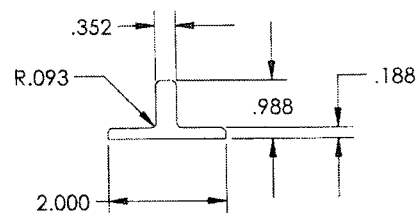
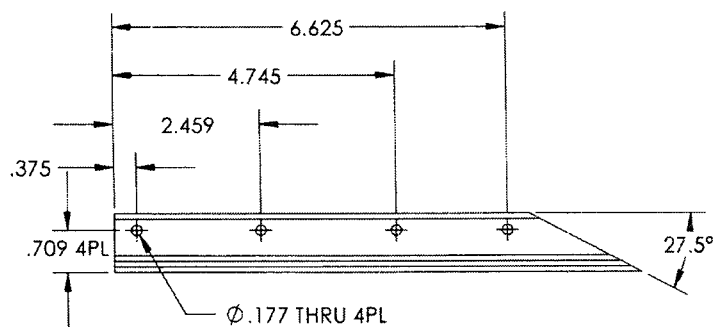
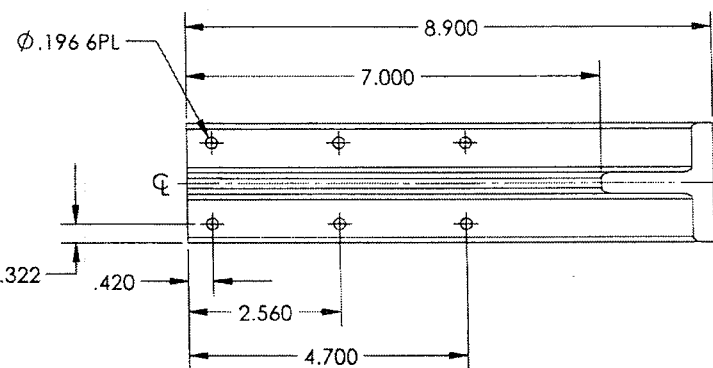
QTY	FIN	REV	DESCRIPTION	MAT'L	SPEC.
4	649.5013	DEFLECTOR	△	△△	
3	649.5012	DEFLECTOR	△	△△	
2	649.5011	DEFLECTOR	△	△△	
1	649.5010	DEFLECTOR	△	△△	
QTY	FIN	REV	DESCRIPTION	MAT'L	SPEC.
4	649.5013	DEFLECTOR	△	△△	
3	649.5012	DEFLECTOR	△	△△	
2	649.5011	DEFLECTOR	△	△△	
1	649.5010	DEFLECTOR	△	△△	
4	649.5013	DEFLECTOR	△	△△	
3	649.5012	DEFLECTOR	△	△△	
2	649.5011	DEFLECTOR	△	△△	
1	649.5010	DEFLECTOR	△	△△	

QTY	FIN	REV	DESCRIPTION	MAT'L	SPEC.
4	649.5013	DEFLECTOR	△	△△	
3	649.5012	DEFLECTOR	△	△△	
2	649.5011	DEFLECTOR	△	△△	
1	649.5010	DEFLECTOR	△	△△	
4	649.5013	DEFLECTOR	△	△△	
3	649.5012	DEFLECTOR	△	△△	
2	649.5011	DEFLECTOR	△	△△	
1	649.5010	DEFLECTOR	△	△△	

QTY	FIN	REV	DESCRIPTION	MAT'L	SPEC.
4	649.5013	DEFLECTOR	△	△△	
3	649.5012	DEFLECTOR	△	△△	
2	649.5011	DEFLECTOR	△	△△	
1	649.5010	DEFLECTOR	△	△△	
4	649.5013	DEFLECTOR	△	△△	
3	649.5012	DEFLECTOR	△	△△	
2	649.5011	DEFLECTOR	△	△△	
1	649.5010	DEFLECTOR	△	△△	

QTY	FIN	REV	DESCRIPTION	MAT'L	SPEC.
4	649.5013	DEFLECTOR	△	△△	
3	649.5012	DEFLECTOR	△	△△	
2	649.5011	DEFLECTOR	△	△△	
1	649.5010	DEFLECTOR	△	△△	
4	649.5013	DEFLECTOR	△	△△	
3	649.5012	DEFLECTOR	△	△△	
2	649.5011	DEFLECTOR	△	△△	
1	649.5010	DEFLECTOR	△	△△	

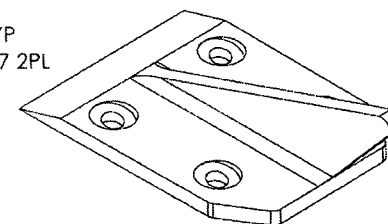
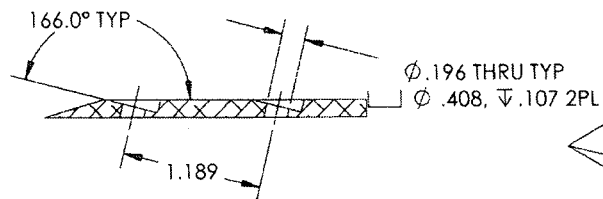
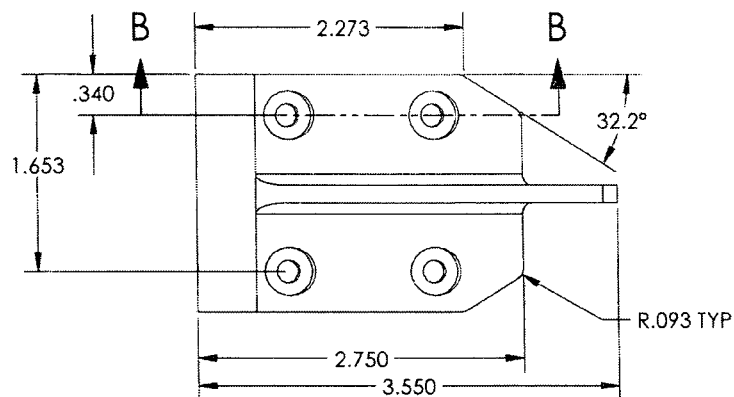
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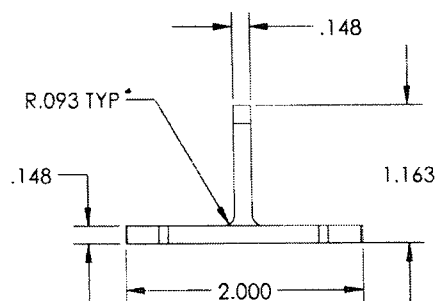
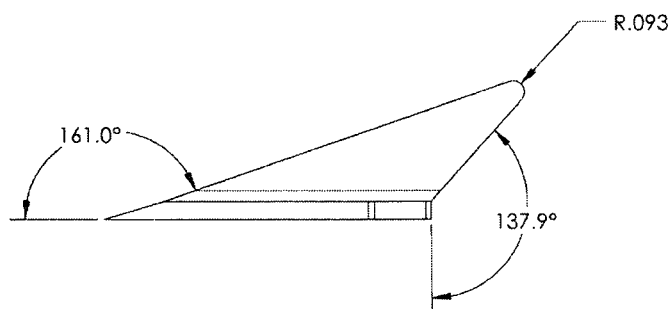
649.5011

ORIGINAL DATE 11/03/11		APICAL INDUSTRIES	
DRAWN BY A. QUAN		2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL P. BRAYD 11/03/11		DEFLECTOR	
CONTRACT NO.		649.5000	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS ± .01 2 PLACE DECIMALS ± .02 1 PLACE DECIMALS ± .05		SHEET B	REV C
SCALE: NONE		SHEET 2 OF 4	

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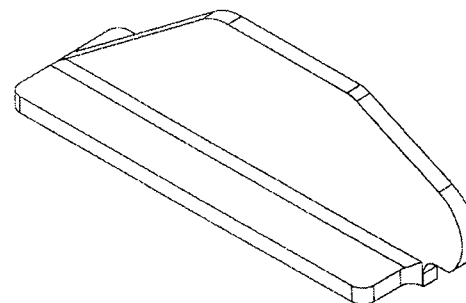
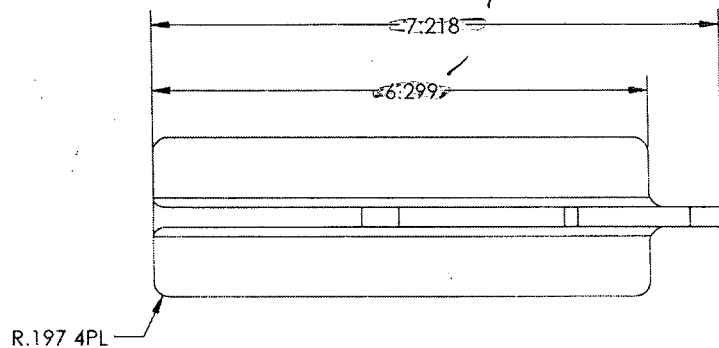


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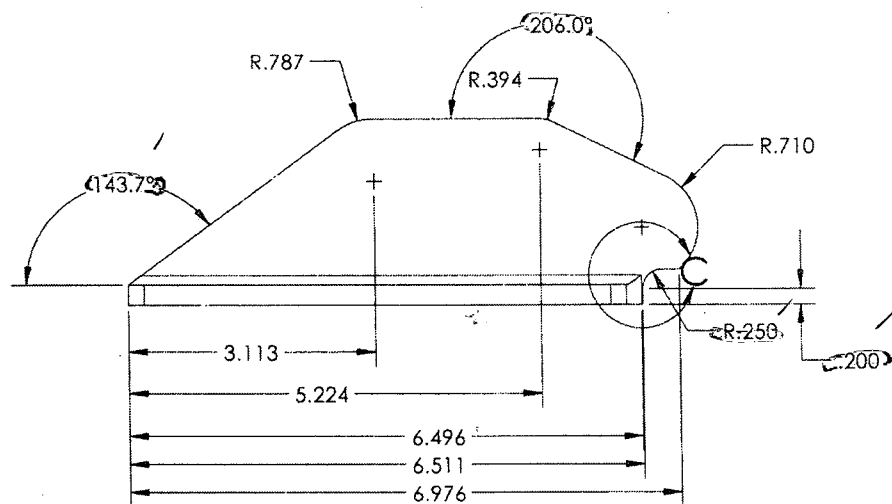


ORIGINAL DATE 11/03/11		APICAL INDUSTRIES		
DRAWN BY: T. REYES		2608 TEMPLE HEIGHTS DR.		
A. QJAH		OCEANSIDE, CA. 92056-3512 (760)724-5300		
DRAWING APPROVAL P. BRAVO		DEFLECTOR		
CONTRACT NO.				
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS .015 3 PLACE DECIMALS .005 ANGLES ± .5°		REV	CAGE CODE	REV
		B	07M26	649.5000
		SCALE NONE		SHEET 3 OF 4

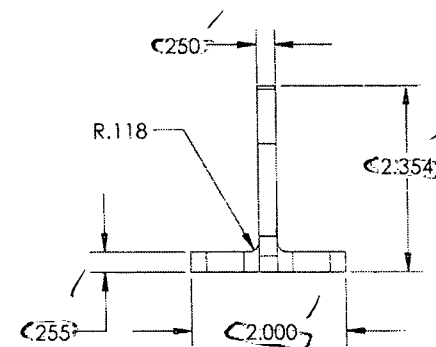
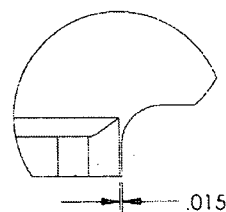
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649.5013



DETAIL C  
SCALE 2 : 1.5



ORIGINAL DATE 11/02/11		APICAL INDUSTRIES	
DRAWN BY A. GUAN	CHECKED P. BRAVO	2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300	
DRAWING APPROVAL P. BRAVO 11/02/11		DEFLECTOR	
CONTRACT NO.		SITE B	REV C
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS ± .03 2 PLACE DECIMALS ± .05 ANGLES ± .5°		DWG. NO. 649.5000	SCALE NONE
		SHEET 4 OF 4	







A.T.G. Industries Inc.  
731, rue Industrielle Rd.  
PLATING DEPARTMENT  
Rockland, On K4K 1T2  
Canada  
Ph: (613) 446-4544  
Fax: (613) 446-4556

### Pack List

Number: 62813

Date: 09-Jan-14

#### To

DART AEROSPACE LTD  
1270 ABERDEEN ST.  
HAWKESBURY, ON K6A 1K7  
Canada

#### Ship To


DART AEROSPACE LTD  
1270 ABERDEEN ST.  
HAWKESBURY, ON K6A 1K7  
Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

Terms		Ship Via	
Quantity	Description	Rev:	
1 lot	Part: ASST 19 PCS 646.9910 (11.90\$) 9 PCS 647.9315 (14.35\$) 10 PCS 649.5010 (34.00\$) 13 PCS 649.5011 (11.75\$) 32 PCS 649.5012 (7.30\$) 34 PCS 649.5013 (11.60\$) 16 PCS 649.5212 (9.00\$) 16 PCS 649.5214 (9.00\$)  HARD ANODIZE BLACK MIL-A-8625 TYPE III CLASS 2  13 PCS D3229-7 (1.10\$) 16 PCS D3299-5 (1.15\$)  BLUE ANODIZE MIL-A-8625 TYPE II CLASS 2  PRICE IS PER PIECE Job: 20140010	PO: 22353	Line:
Certificate of Conformance			
A.T.G. Industries certifies that all items in this shipment are in conformance with all requirements, specifications and drawings referenced in the purchase order.			
ISO 9001 : 2008 REGISTERED ATG SALES-2010 TERMS APPLY			
DATE : 9/1/14			
CERTIFIED SIGNATURE : 			
RECEIVER SIGNATURE : _____			